SURFACE WATER POLLUTANTS

What does the indicator tell us?

This indicator shows changes in concentration levels for selected surface water parameters. Using data from the U.S. Geological Survey (USGS), currently the indicator presents six parameters USGS monitored in rivers and streams: dissolved oxygen, dissolved solids, nitrate, total phosphorus, fecal coliform, and suspended sediments. For example, from 1980 to 1989 USGS monitoring data from select National Stream Quality Accounting Network stations showed no change in nitrate concentration levels in 86 percent of the stations, a downward trend in 8 percent, and an upward trend in 6 percent.

How will the indicator be used to track progress?

This indicator is intended to track, over time, the group of parameters that we have identified as significant pollutants in our rivers, streams, lakes, estuaries, and coastal waters. This is a measure of ambient surface water quality, ambient meaning the quality of waters in general, as opposed to waters at a specific point impacted by an identified pollutant.

What is being done to improve the indicator?

The information displayed by this indicator covers only rivers and streams and does not include all of the parameters being measured by the loading indicator (Indicator 16a). EPA and its partners intend to track the following list of

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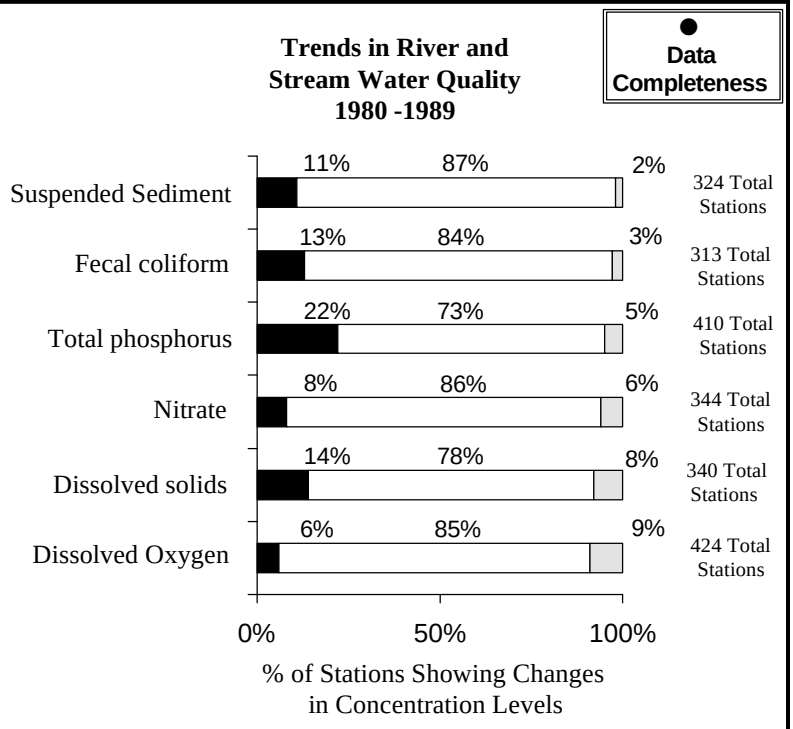

Note: The presence of an upward trend indicates an increase in the concentration of a particular constituent while a downward trend indicates a decrease in the concentration. Analyses were made on data from USGS National Stream Quality Accounting Network stations. Trend data for phosphorus is from 1982-1989.

Source: U.S. Geological Survey, 1990

parameters for both this ambient indicator and for the loadings indicator.

Toxic Pollutants	*Conventional Pollutants*
• Cadmium	• Ammonia
• Copper	• BOD
• Lead	• Nitrogen (and nitrate)
• Mercury	• Pathogens
• Phenol	• Phosphorus
• Total residual chloride	• Suspended solids

These parameters would provide the basis for the national indicator providing general information on changes in the measurements taken in surface waters.

EPA will work with its partners, particularly states, tribes, USGS, and the National Oceanic and Atmospheric Administration (NOAA), to more accurately and consistently assess and report the data collected. Data sources that can be used for reporting this indicator are the USGS databases (particularly for rivers and streams); EPA's Storage and Retrieval information system (STORET), which contains state, USGS, and other data, for all surface waters; and NOAA for coastal waters. Partners will need to work together to determine the best method for aggregating, interpreting, and presenting the information for this indicator. Once agreement is reached, guidance can be provided to those collecting the data to ensure the data's quality and accuracy.

What is being done to improve conditions measured by the indicator?

This indicator provides only the general chemical information with which to assess national water quality conditions. The chemical information must be used along with physical and biological information (Indicator 7) to provide a holistic picture of water quality. However, this indicator does provide general trends for specific pollutants of concern and general water quality conditions, and it can indicate where additional action to control chemical impacts is necessary. For example, EPA and its partners might need to upgrade treatment at sewage treatment plants or industrial facilities, or recommend best management practices or policies to control nonpoint sources and address ambient water quality problems.

For More Information:

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